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EXAMINER	
YAO, SAMCHUAN CUA	
ART UNIT	**PAPER NUMBER**
1733	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/604,300	HAUSER, BRUCE H.	
	Examiner	Art Unit	
	Sam Chuan C. Yao	1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,4-9,11-13 and 15-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,4-9,11-13 and 15-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 4-7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over King (6,461,713) in view of Matsumiya (US 5,204,157), GB 1,478,963 and France 2524406 A.

With respect to claim 1,6, and 9, King discloses a method of making a carrier for use as a reinforcement of an extruded elastomeric sealing strip (taken to be the recited filler material), the method comprises folding a wire filament (4) transversely back and forth across a width to form a serpentine carrier (40) and then welding an elongation reducing member (30; taken to be the recited carrier member) oriented in an axial direction. See the abstract; column 3 lines 63-67; column 4 lines 2-30; column 5 lines 1-10; column 6 lines 13-67; column 7 line 61 to column 8 line 28; column 9 lines 25-32; figures 1 and 4-9. Note: the recited filler material is taken to read on the elastomeric sealing strip, because this strip encapsulates a resultant reinforcing carrier (col. 1 lines 6-27).

King does not teach adhesively bonding an elongation reducing member to a serpentine carrier. However, such would have been obvious in the art, because it old in the art to interchangeably weld, adhesively bond or stitch an axially extending carrier member to a serpentine configured carrier as exemplified in the teachings of Matsumiya (col. 2 lines 40-46, col. 3 lines 20-26, and col. 5 lines 55-68). None, but only the expected result of securing an elongation reducing member to a serpentine carrier would have been achieved.

King does not teach forming a V-shaped serpentine carrier. However, such would have been obvious in the art, because: a) King is open to forming various shapes for a serpentine configured carrier as evidence from the following passage: *"The serpentine frame configuration ... The limbs 6,8,10 can be straight sided, , banana-shaped, or propeller-shaped regions therebetween or any combination thereof."* (col. 4 lines 2-20); and, b) it is old in the art to form a V-shaped zig-zag serpentine carrier for a joint sealing strip as exemplified in the teachings of GB '963 (figure 2).

King does not teach extruding a sealing element about a extruded material covered serpentine configured carrier. However, such would have been obvious in the art as such is conventional in the art as exemplified in the teachings of France '406 (abstract; figure 1).

With respect to claims 4-5, see for example figure 1 in France '406.

With respect to claim 7, as noted above, it old in the art to interchangeably weld, adhesively bond or stitch an axially extending carrier member to a serpentine

configured carrier as exemplified in the teachings of Matsumiya (col. 2 lines 40-46, col. 3 lines 20-26, and col. 5 lines 55-68). Therefore, it would have been obvious in the art to adhesively secure warp threads (16,22) in a process of Matsumiya. As clearly illustrated in figure 1, an elongation reducing member (30) is different from warp threads (16,22). For this reason, this claim would have been obvious in the art.

3. Claims 1, 4-7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumiya (US 5,204,157) in view of GB 1,478,963, Bright (US 4,699,837), France 2524406 A.

With respect to claims 1,4-6, and 9, Matsumiya discloses a method of making an elongated carrier for productions of door seals, the method comprises bending a wire (3) transversely back-and-forth to form a zig-zag serpentine configured carrier; and attaching a plurality of axially oriented strands (9,11,13) onto the serpentine configured carrier (col. 2 lines 41-43, col. 3 lines 24-38, col. 5 lines 55-66 and col. 8 lines17-23; figures 1 and 3-4). Matsumiya also teaches applying axially oriented tapes (25; taken to be the recited *"longitudinal carrier member"*) onto a serpentine configured carrier by *"stitching, welding, adhesive, or any other way"* (emphasis added) to control the spacing of a serpentine configured carrier (col. 2 lines 40-46; col. 5 lines 55-66; col. 7 lines 14-26; figure 4).

Matsumiya does not teach forming a V-shaped serpentine carrier. However, such would have been obvious in the art, because: a) Matsumiya is open to forming various shapes for a serpentine configured carrier as evidence from the following

passage: *"... the carrier is comprised of a continuous length of stiff metal wire ... The transverse lengths of wire may be straight or curved, the curved variety being either banana shaped or propeller shaped, or a combination of straight and/or banana shape and/or propeller shape."* (col. 1 lines 17-25); and, b) it is old in the art to form a V-shaped zig-zag serpentine carrier for a joint sealing strip as exemplified in the teachings of GB '963 (figure 2). See also figure 2 of the Bright patent.

Matsumiya does not explicitly disclose filling V-shaped void with a filler material. However, it would have been obvious in the art to fill V-shaped void with a filler material in forming a serpentine configured carrier taught by Matsumiya, because it is conventional in the art to extrude an plastic or rubber material to a serpentine configured carrier such that the extruded material *"completely encloses"* the carrier as shown in figures 6-7 of the Bright (col. 1 lines 7-22; col. 2 lines 45-60). The recited filler material is taken to read on the extruded material, because, as clearly illustrated in figure 6 of the Bright patent, the extruded material fills voids in a serpentine configured carrier.

Matsumiya does not teach extruding a sealing element about a extruded material covered serpentine configured carrier. However, such would have been obvious in the art as such is conventional in the art as exemplified in the teachings of France '406 (abstract; figure 1). Note: France '406 illustrates a sealing strip having a U-shaped profile.

With respect to claim 7, since: a) it is old in the art to weld a longitudinally extending strand to a serpentine configured carrier; and, b) Matsumiya is not restrictive to stitching strands to a serpentine configured carrier and further teaches attaching two different types of longitudinally extending strands to a serpentine configured carrier (col. 2 lines 40-46, col. 3 lines 20-26, and col. 5 lines 26-42 and lines 55-68); this claim would have been obvious in the art.

4. Claim 1 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered paragraph 2 or 3 as applied to claim 1 above, and further in view of Key (US 5,204,157).

Note: the recited filler material in claim 1 is taken to read on an extruded encapsulating material. The rejection herein is alternative to the one set forth in numbered paragraph 2 or 3 in the event that, the recited filler material does not read on an extruded encapsulating material.

Since Key discloses the use of a filler material to prevent *"hungry horse"* appearance (col. 1 line 52 to col. 2 line 7), it would have been obvious to one of ordinary skill in the ad to use a filler in the strip of the primary reference in view of the teachings of Keys to provide a smooth outer surface to a resultant laminated strip. Note: the recited mask layer in claims 15-17 is taken to read on an extruded filler sheet (24) taught Key.

5. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered 2 or 3 as applied to claim 1 above, and further in view of Cook et al (US 5,072,567).

Matsumiya or King appears to be silent on forming various cross-sections of a continuous strand wire recited in these claims. However, it would have been obvious in the art to use the various cross-sections of a continuous strand wire recited in these claims, because it is old in the art to use a continuous strand having various cross-sectional configurations as exemplified in the teachings of Cook et al (col. 5 lines 36-43).

6. Claims 8 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered paragraph 2 or 3 as applied to claim 1 above.

With respect to claim 8, since the recited materials for a carrier member is conventional in the art, this claim would have been obvious in the art.

With respect to claim 15-19, it should be noted that, in numbered paragraph 4, the mask layer recited in claims 15-17 is taken to read on an extruded filler sheet taught by Key. The rejection set forth herein is an alternative to numbered paragraph 4 above. Matsumiya does not teach incorporating tape layer (25; taken to be a masking layer) illustrated in figure 3 with strand (9 and 13) layer illustrated in figures 1-3. However, it is now well settled "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose ... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F2d 846, 205 USPQ 1069, CCPA 1980). Likewise, it would have been obvious to one having ordinary skill in the art to combine two known processes, each of which is taught

by the prior art to be useful for the same purpose, to form a new process to be used for the same purpose. For this reason, it would have been obvious in the art to incorporated the embodiment illustrated in figure 3 to the embodiments illustrated figures 1-3.

7. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the references set forth in numbered paragraph 2 or 3 as applied to claim 1 above, and further in view of Gibson (US 4,624,093).

Neither King nor Matsumiya teaches forming a serpentine configured carrier which is *"asymmetrical about a longitudinally running center line"*. However, such would have been obvious in the art, because Gibson, drawn to making a U-shaped sealing strip, teaches the desirability of forming a serpentine configured carrier which is *"asymmetrical about a longitudinally running center line"* (abstract; col. 1 line 64 to col. 2 line 28; figures 1-3, 5, and 8-9).

Response to Arguments

8. Applicant's arguments filed 01-04-05 have been fully considered but they are not persuasive.

On page 6 to page 7 full paragraph 1, Counsel argues that King does not teach forming a serpentine configured carrier having V-shaped bends. However, as noted above, such would have been obvious in the art. See numbered paragraph 2 for details.

On page 7 full paragraph 2, Counsel argues that King fails to teach the step of filling the voids in the wire with a filler material. Examiner strongly disagrees. It is

respectfully submitted that, the recited filler material reasonably reads on the elastomeric sealing strip, because this elastomeric strip encapsulates a resultant reinforcing carrier (col. 1 lines 6-27). As for Counsel's assertion that, *"King merely covers the voids by the sealing strip."*. Examiner strongly disagrees. Extruded elastomeric sealing strip (which is in a molten condition) must naturally fill to least a certain degree voids in a resultant serpentine configured carrier. See for example, figures 6 and 8 of the Bright patent. In any event, as noted in numbered paragraph 4, since Key discloses the use of a filler material to prevent *"hungry horse"* appearance (col. 1 line 52 to col. 2 line 7), it would have been obvious to one of ordinary skill in the ad to use a filler in the strip of the primary reference in view of the teachings of Keys to provide a smooth outer surface to a resultant laminated strip.

On pages 8-9, Counsel argues that *"[w]hile Matsumiya or Bright <u>may fill some of the voids between the wire passes</u>, these references do not teach the same method as required by Claim 1. The step of purposely filling voids is the wire passes in a separate step greatly lessens the hungry horse problem than just extruding a covering."* (emphasis added) It is respectfully submitted that, Counsel's argument is not commensurate with the scope of recited claims. Nothing in the recited claims remotely require *"purposely filling voids is the wire passes in a separate step greatly lessens the hungry horse problem than just extruding a covering."*. Claim 1 ONLY requires *"filling the V-shaped voids with a filler material"*. This limitation does NOT require completely filing V-shaped voids.

Therefore, by Applicant's own characterization of the Matsumiya or the Bright patent, this limitation fails to define over the process taught by Matsumiya or Bright. In any event, as noted in numbered paragraph 4, since Key discloses the use of a filler material to prevent "hungry horse" appearance (col. 1 line 52 to col. 2 line 7), it would have been obvious to one of ordinary skill in the ad to use a filler in the strip of the primary reference in view of the teachings of Keys to provide a smooth outer surface to a resultant laminated strip.

As for Counsel's argument on page 9 full paragraph 3 regarding claim 20, Counsel's argument is moot in light of a new ground of rejection.

As for Counsel's argument on page 10 full paragraphs 2-3, it would appear that Counsel is resorting to a classic piece-meal analysis of the applied references. While, it is true that, Keys does not suggest forming V-shaped voids, formation of V-shaped voids in this art is well known in the art as exemplified in the teachings of GB '963 (figure 2). It is respectfully submitted that, the collective teachings in numbered paragraph 2 or 3 above would have reasonably suggested to one in the art to form a serpentine configured carrier which has V-shaped voids.

As noted in the prior office action, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Moreover, an obviousness question cannot be approached on the basis that an artisan having ordinary skill would have known only what they read in references, because such

artisan must be presumed to know something about the art apart from what the references disclose. See In re Jacoby, 309 F.2d 513, 135 USPQ 317 (CCPA).

Conclusion

It is suggested for Applicant to incorporate the following limitations to claim 1 in order to define over the art of record:

a) disposing a cover layer about the reinforcement clips, the at least one longitudinal member, and the filler material;

b) adding the limitation in claim 11;

c) providing spaced-apart masking layers to the undulating strand of wire; and,

d) adding the limitation in claim 20.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sam Chuan C. Yao whose telephone number is (571) 272-1224. The examiner can normally be reached on Monday-Friday with second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (571) 272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sam Chuan C. Yao
Primary Examiner
Art Unit 1733

Scy
01-24-05